

**MALAYSIAN HALAL STANDARD (MS1500:2004) : DO HALAL FOOD
MANUFACTURERS HAVE INTENTION TO BE CERTIFIED ?**

By

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ABSTRACT

The Malaysian government has a vision of becoming a global halal hub. In line with this MS1500:2004 Halal Standard was introduced as extension to the existing halal logo and certification. The objective of this study is to investigate whether there is any intention of halal food manufacturers to be certified with the Halal Standard. Halal food manufacturers were selected in this study because they already have the basic knowledge of halal requirements. A modified model of the Theory of Planned Behavior was used as the basis of this study. Attitude component in this study was represented by perceived problems and perceived benefits, subjective norm was represented by competitive pressure and customer's expectation and perceived behavioral control was represented by perceived compliance control. A total of 70 responses were received from questionnaires distributed to all halal food manufacturers listed in the FMM-MATRADE Industry (Food and Beverage – halal section) 2005/2006 directory. The findings indicate that TPB model is fit to predict the intention of halal food manufacturers to be certified with the Halal Standard. The findings also shows that perceived benefits, customer's expectation and perceived compliance control has a positive influence on intention of halal food manufacturers to be certified with the Halal Standard. Perceived benefits had a greater relative weight compared to customer's expectation and perceived compliance control. The other two factors, perceived problems and competitive pressure does not have a significance influence on intention of halal food manufacturers to be certified with the Halal Standard.

ABSTRAK

Kerajaan Malaysia mempunyai visi untuk menjadi hub halal global. Selaras dengan ini, Standard Halal MS1500:2004 diperkenalkan sebagai tambahan kepada pensijilan logo halal yang sedia ada. Kajian ini bertujuan untuk menyiasat sama ada pengeluar makanan halal mempunyai niat untuk mendapatkan pensijilan Standard Halal. Pengeluar makanan halal dipilih dalam kajian ini kerana mereka mempunyai pengetahuan asas tentang syarat-syarat halal. Model Teori Kelakuan Terancang yang diolah sedikit digunakan sebagai asas dalam kajian ini. Komponen sikap diwakili oleh pandangan permasalahan dan pandangan keberuntungan. Norma subjektif diwakili oleh tekanan persaingan dan jangkaan pelanggan dan pandangan kawalan kelakuan diwakili oleh pandangan kawalan pematuhan. Sejumlah 70 maklumbalas diterima dari soal selidik yang diedarkan ke seluruh pengeluar makanan halal yang tersenarai dalam direktori FMM-MATRADE Industry (Food and Beverage – bahagian halal) 2005/2006. Keputusan menunjukkan model TPB adalah padan untuk menjangka niat pengeluar makanan halal untuk mendapatkan pensijilan Standard Halal. Keputusan juga menunjukkan pandangan keberuntungan, jangkaan pelanggan dan pandangan kawalan pematuhan mempunyai pengaruh positif yang signifikan ke atas niat pengeluar makanan halal untuk mendapatkan pensijilan Standard Halal. Pandangan keberuntungan mempunyai pemberatan relatif yang lebih besar berbanding dengan jangkaan pelanggan dan pandangan kawalan pematuhan. Dua faktor lain iaitu permasalahan dan tekanan kompetitif tidak mempunyai pengaruh yang signifikan ke atas pengeluar makanan halal untuk mendapatkan pensijilan Standard Halal.

CHAPTER 1

INTRODUCTION

1.0 Introduction

The government of Malaysia has a vision to promote Malaysia as a Global Halal Hub. In line with this, it is significantly important to comply and promote Halal Standards that are comparable to the international standard. Halal should encompass all level of the food chain from raw materials sourcing until the end product reaches the consumers. The introduction of MS1500:2004 Halal Standard concept reflects the government commitment. This study is undertaken to further study about the Halal Standard particularly the antecedents of its adoption. In this chapter, background of the study were briefed followed by problem statements, objective of the study, research questions, significance of the study and definition of terms.

1.1 Research Background

Halal food has been around for over fourteen hundred years but it is only in recent decades and particularly in multi-cultural societies that the labeling and branding of halal products has developed. In Malaysia, there is rules and regulation pertaining to halal labeling and branding. Halal word cannot be simply used as it is governed by Trade Description Act 1972 section 10, Trade Descriptions (Use Of Expression “Halal”) Order 1975. One manufacturer must be certified by a government body in order to use halal word on their products.

The halal issue has been getting a wide coverage in the Malaysian media lately, much to the concern of muslim consumers. Numerous cases of current halal

logo and certification had been misused and infringed. Food manufacturers are expected to adhere to halal requirements more seriously.

In the past several years, the Department of Islamic Development Malaysia (JAKIM) is responsible in issuing halal certification and logo for industries that involved in food and beverages production, household products, food premises and slaughter house. In the state level, JAKIM is represented by the state's Islamic Council. The emphasis in halal certification and logo is more on the end product and ingredients used. Understand that halal brought a bigger and wider meaning, a more comprehensive and thorough standard should be used in ensuring the 'halal'ness of a product. This is where MS1500:2004 Halal Standard comes in place. It was jointly introduced by JAKIM and Department of Standards Malaysia (DSM) to expand and improvised the existing halal logo and certification.

The MS1500:2004 Halal Standard was gazetted on July 10, 2004 and officially launched by Prime Minister on 16th of August 2004. It prescribes practical guidelines for food industry on the production, preparation, handling and storage of halal food (including nutrient supplements) and to serve as a basic requirement for food product and food trade or business in Malaysia (Malaysian Standard, 2004). It should be use together with MS 1480 : 1999 (Food Safety According to Hazard Analysis and Critical Control Point, HACCP) and MS 1514 : 2001 (General Principles of Food Hygiene). These two standards (MS1480:1999 and MS1514:2001) are actually prerequisites for companies to obtain Halal Standard. In fact all food manufacturers must first fulfill the requirements of these two standards before they are allowed to operate their businesses. The requirement's fulfillment of these two standards will be certified by the authorized personnel from the DSM. Since both JAKIM and DSM will be conducting the inspection pertaining to Halal Standard, companies that are

successful in obtaining Halal Standard certification are deemed to fulfilled the requirements of MS1480:1999 and MS1514:2001.

MS1500:2004 requires much of company's management attention as it involved a complicated process and procedures. In order to fully understand or to be in compliance with the Halal Standard especially for non-muslim companies, an external consultant may need to be hired. Company must train their employees to fully adhere to Halal Standard guidelines and procedures. There is also a high possibilities of a need to purchase new equipments or to modify the existing ones to be in line with the Halal Standard requirement. This will involve a capital investment. Another requirement of the Halal Standard is the high level of cleanliness and hygiene of the premises especially in the production area. It must be in accordance with MS 1514 : 2001 (General Principles of Food Hygiene) mentioned earlier. All wastes must be managed according to the existing law. Apart of being hygienic, the safety or the hazardous free status of the products including its packaging materials must be in accordance with MS 1480 : 1999 (Food Safety According to Hazard Analysis and Critical Control Point, HACCP). All these requirements are set as such to improve the quality and standard of halal food and products in muslim's life and mankind entirely.

Despite of its intricate requirements, MS1500:2004 Halal Standard is an effective tool for food manufacturers in leveraging their competitive advantage especially in efforts to capture more muslim market locally or globally. It can helps access the market of the hundreds of millions of muslim worldwide. The Halal Standard also can be used as tool to set an acceptable high standard of quality.

Based on the Federation of Malaysian Manufacturers (FMM) and Malaysian External Trade Development Corporation (MATRADE) Industry directory (Food & Beverage), 115 registered companies or manufacturers are holding a halal status. They

had been certified with halal logo and certification by JAKIM or the state's Islamic Council. These halal food manufacturers are in the best position to be certified with the Halal Standard as they understood the basic requirement for halal food. It is important to study whether the existing halal food manufacturers have any intention to be certified with the new Halal Standard.

1.2 Problem Statement

Quoted from islamicpopulation.com (2006), out of 6.3 billion of world population, 23.5% of it is muslims and 59% of 26.1 million of Malaysian population is muslims (islamicpopulation.com, 2006). Their awareness and need to purchase and consume a 'religiously legal' food without hesitation had put the demand for halal food at a phenomenal level. Every human being desires a good quality of life. One way to achieve it is through the foods that are consumed every day. Muslims believe that halal food is an essential recipe in a good quality of life. In fact in Islamic teaching, one muslim must not consumed anything else except for halal food. The onus now fall on the halal food manufacturers to provide as such.

Acknowledging such demand, the government of Malaysia had and still putting a lot of efforts in promoting Malaysia to be a global halal hub. Being an active member of Organisation of the Islamic Conference (OIC) and our current Prime Minister as the chairman of OIC, Malaysia is well positioned and in the right path to achieve its vision.

Even though the government had provided much encouragement and incentives for companies to obtained halal status, there are instances where halal logo is being infringed and misused by unethical entrepreneurs and manufacturers. For example, early this year public was shocked by the news that the leading chicken

meat-based food producer sued by Association of Muslim Consumers for non-compliance of halal requirements (The Star, 2006). Another shocking news is where two sausages producers misused halal logo and certification from Selangor Islamic Religious Department (JAIS) and JAKIM by claiming they were producing vegetable-based sausages casing but the truth is that pig intestines were used instead (Bernama, 2005). A lot of halal logo and certification withdrew from companies due to infringement of conditions and procedures in preparation of halal food (Bernama, 2005). Hence, to tackle the issue a more comprehensive and standard way, MS1500:2004 Halal Standard is being introduced as guideline before a halal status is awarded to complied manufacturers.

Considering the growing needs of the muslim customers, the intricate Halal Standard requirements, resources in hand and the visionary calls of government's to be a global halal hub, do the halal food manufacturers have any intention at all to be certified with the new MS1500:2004 Halal Standard? The question relies on whether or not the companies that have been certified with halal logo want to enhance their business by going further and be certified with the Halal Standard?

1.3 Research Objectives

This study mainly aims to investigate whether there is any intention of halal food manufacturers to be certified with MS1500:2004 Halal Standard. The investigation is conducted using the Theory of Planned Behavior (TPB) model which comprises of three components i.e attitude, subjective norm (SN) and perceived behavioral control (PBC). In this study, attitude is represented by perceived problems and perceived benefits, SN is represented by competitive pressure and customer's expectation and PBC is represented by perceived compliance control. This study also intended to

identify the factors that influence the halal food manufacturer's intention to be certified with the MS 1500:2004 Halal Standard. Overall, this study focuses on several objectives, which can be summarized as below:-

- 1) To study whether TPB model can be used to predict the halal food manufacturers intention to be certified with the MS1500:2004 Halal Standard;
- 2) To examine the influence of factors such as perceived problems, perceived benefits, competitive pressure, customer's expectation and perceived compliance control on intention of halal food manufacturers to be certified with the MS1500:2004 Halal Standard.

1.4 Research Questions

The focus of this research is to answer the following questions that are investigated under the study:-

- (a) Can TPB model be used to predict the halal food manufacturers intention to be certified with the MS1500:2004 Halal Standard?
- (b) Can factors such as perceived problems, perceived benefits, competitive pressure, customer's expectation and perceived compliance control influence the intention of halal food manufacturers to be certified with MS1500:2004 Halal Standard?

1.5 Significance of the Study

A growing concern in muslim community of what they and their family consumed everyday had increase the demand of halal food in the market. This increasing trend in demand eventually forced halal food manufacturers to provide such products. It is not as easy as anyone think as halal status involves a lot of procedures and guidelines to

be adhered to. Government's vision of becoming a global halal hub in a way also forced food manufacturers to obtain a halal status, MS1500:2004 Halal Standard to be exact. Findings from this study hopefully will shed some lights on whether consumer's need and demand for a more thorough halal food will be fulfilled by the halal food manufacturers and whether the government's call had been answered.

1.6 Definitions of Terms

Halal

The word halal is originated from Arabic word meaning permitted, allowed, authorized, approved, sanctioned, lawful, legal, legitimate or licit (DBP, 2005).

Halal food products

Food or drinks that permitted and fit for consumption by muslims and must conform to the Islamic dietary law as specified in the Quran, the Sunnah (sayings) of the Prophet Muhammad S.A.W., his Sunnah (tradition), and in the fiqh (teachings) of the Islamic Jurists: Hanafi, Shafi'i, Maliki and Hanbali (Zuraini et.al, 2004) Other sources of laws are Ijma' (collective approval) and Qiyas (analogy) of Islamic scholars. Additionally, for a product to be halal it must be as a whole and in part, in accordance to the followings:-

- i) must not consist or contained of any part of materials or animals that are prohibited for a Muslim to consumed or not slaughtered according to Syariah Law.
- ii) must not contained any filthy materials according to Syariah Law
- iii) must not be prepared, processed or manufactured with equipments and tools that are not filthy-free according to Syariah Law and

- iv) must not during preparation, processing or storing be touched or close to any prohibited food which are not complying with all the above or any thing that are considered as filthy according to Syariah Law

In terms of Malaysian law, the use of halal word is governed by Trade Description Act 1972 section 10, Trade Descriptions (Use Of Expression “Halal”) Order 1975.

Halal logo certification

In Malaysia, the Department of Islamic Development Malaysia (JAKIM)’s Islamic Food and Consumer Goods Research Division is held responsible to act as government institute in issuing the Halal certificates and logo for industries that involved in food production, beverages, household products, food premises and slaughter house. JAKIM became the sole issuer of halal certification and logo in Malaysia after amendments were made to the Trade Description Act 1972 (Use of Halal Word 1975). In the state level, JAKIM is represented by the state’s Islamic Council (JAIN or MAIN)

Halal Standard

The MS1500:2004 Halal Standard prescribes practical guidelines for food industry on the production, preparation, handling and storage of halal food (including nutrient supplements) and to serve as a basic requirement for food product and food trade or business in Malaysia (Malaysian Standard, 2004). It should be use together with MS 1480 : 1999 (Food Safety According to Hazard Analysis and Critical Control Point, HACCP) and MS 1514 : 2001 (General Principles of Food Hygiene).

Halal food manufacturers

In this study, halal food manufacturers is referring to those companies manufacturing food and beverages and certified with halal logo and certification by JAKIM or state's Islamic Council. These companies are listed in the FMM-MATRADE Industry (Food and Beverage – halal section) 2005/2006 directory which is used as population frame in this study.

Perceived problems

Perceived problems in this study is defined as problems or difficulties that might be encountered by the halal food manufacturers if they were to be certified with the Halal Standard. Some of the problems such as external consultant involvement and high cost involvement could serve as hindrance factors for them to be certified with the Halal Standard.

Perceived benefits

Perceived benefits in study is defined as favourableness and advantages that could be benefited by the halal food manufacturers if they were to be certified with the Halal Standard. Some of the benefits are gain new customers, increase market share, boosting company image, easy global market penetration and many more.

Competitive pressure

Competitive pressure is referring to the force or pressure created by the move or act of competitors that compelled one company to do the same or better. It is also referring to the eagerness to be on top among others in the industry and the sense of importance of having a distinctive competitive advantage.

Customer's expectation

Customer's expectation is referring to what halal food manufacturers think customer expected from them pertaining to the Halal Standard. There should be a degree of commitment by halal food manufacturers towards the Halal Standard expected by the customers.

Perceived compliance control

In this study, perceived compliance control is understood as the degree of readiness of halal food manufacturers to comply with the Halal Standard requirements. This include the ability of those companies to provide training to workers, invest in new equipments and facilities, adhering to the related rules and regulations, getting full support from the management and so on. In other words, it is the ability of a company to control and utilized its resources in order to be certified with the Halal Standard.

Intention

Intention is the probability that one person will perform the behavior. In this study, intention is the probability of the halal food manufacturers to be certified with the Halal Standard. There are factors that can directly influence the probability namely perceived problems, perceived benefits, competitive pressure, customer's expectation and perceived compliance control as explained earlier.

1.7 Organisation of the Study

This study is divided into five chapters. Chapter one serves as an introductory to the study. Chapter two elaborate the underlying theory where review of literatures were

made, chapter three explains how the study was conducted. Chapter four presented all the findings of the study and chapter five discussed the findings and its implications.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter is mainly reviewing the related literatures to show how the framework was constructed. It begins with the discussion on the underlying theories used in this study, how the theories were used in various domain and the advantages of the Theory of Planned Behavior (TPB) model compared to other models. Literatures on halal issues also highlighted. Theoretical framework and hypotheses were presented at the end of the chapter.

2.1 Underlying Theories

It is important that the halal food manufacturers to have an intention to be certified with the Halal Standard before they actually do it. Without any intention, there will be less likely for the firms to be certified with the Halal Standard. The most important theory/ies that can be based on in measuring intention in this study are the Theory of Reasoned Action, TRA (Ajzen & Fishbein, 1980) and the Theory of Planned Behavior, TPB (Ajzen, 1991).

2.1.1 Theory of Reasoned Action (TRA)

Ajzen and Fishbein created the Theory of Reasoned Action in 1967. According to the literature by Taylor (2001), the roots of the Reasoned Action Theory come from the field of Social Psychology. Social Psychologists attempt, among other things, to explain how and why attitude impacts behavior. That is, how and why peoples beliefs change the way they act. The study of attitude's influence on behavior began in 1872 with Charles Darwin. Darwin defined attitude as the physical expression of an

emotion. Social psychologists continued to study attitudes and behaviors between the years of 1918 and 1925 saw many new theories emerging. Having their emphasis on attitude and behavior, it can be postulated that this theory grew out of the 19th century when the field of psychology began to look at the term "attitude". Those theories suggested that attitudes could explain human actions (Ajzen & Fishbein, 1980, p.13).

In basic terms, the Theory of Reasoned Action says that a person's behavior is determined by their attitude towards the outcome of that behavior and by the opinions of the person's social environment. Ajzen and Fishbein (1980, p.62) proposed that a person's behavior is determined by his intention to perform the behavior and that this intention is, in turn, a function of his attitude toward the behavior and his subjective norm. Figure 2.1 shows the model of TRA.

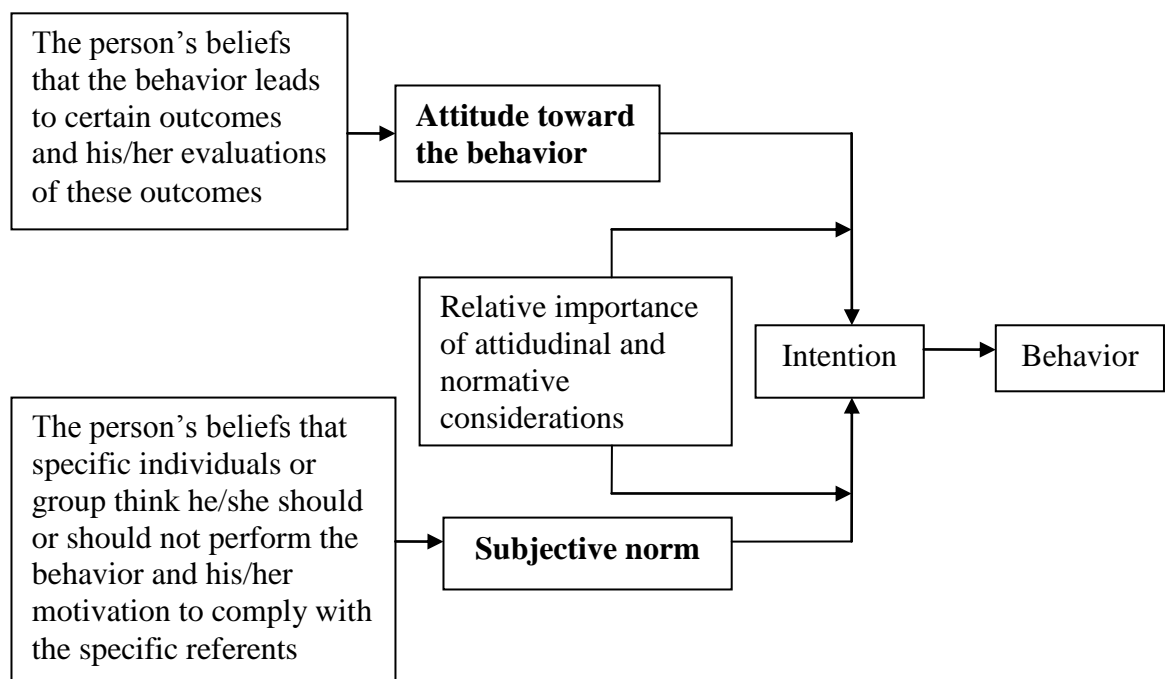


Figure 2.1: Reasoned Action Model
(Source : Azjen & Fishbein, 1980)

2.1.1.1 Attitude

Attitudes are made up of the beliefs that a person accumulates over his lifetime. Some beliefs are formed from direct experience, some are from outside information and others are inferred or self generated. Attitude is defined as a person's general feeling of favorableness or unfavorableness for that behavior, (Ajzen & Fishbein, 1980, p.188). Attitude is traditionally prescribed as psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour. According to Ajzen et. al (1982), an attitude toward a behavior is a positive or negative evaluation of performing that behavior.

Based on the definition and the suitability of the study, the attitude component in this study is represented by perceived benefits and perceived problems faced by the halal food manufacturers if they were to be certified with the Halal Standard. Same approach was applied by Gewald and Dibbern (2005) where perceived benefits and perceived risks were used to examine attitude toward intention using TPB model.

2.1.1.2 Subjective Norm

Subjective Norms (SN) are beliefs about what others will think about the behavior. They are perceptions about how family and friends will perceived the outcome of the behavior (normative belief) and the degree to which this influences whether the behavior is carried out (motivation to comply). It is important to note that subjective norms are formed only in relation to the opinions of persons considered to be significant or important. This is the person perception that most people that are important to him/her think he/she should or should not perform the behavior in question (Ajzen & Fishbein, 1980). SN component in this study is represented by

competitive pressure and customer's expectation as competitors and customers are the most important influence in decision making in any organization.

2.1.1.3 Intentions

Intention(s) are the probability, as rated by the subject, that one person will perform the behavior. This intention is made up of the attitudes and subjective norms previously discussed. Intention will change over time and hence, the longer the time interval, the lower will be the correlation between intention and action. However, the number of intervening steps also affects intention stability; the lower will be the correlation between intention and behavior (Ajzen & Fishbein, 1980).

2.1.1.4 Behavior

According to Ajzen and Fishbein (1980), behavior is the transmission of intention or perceived behavioral control (PBC) into action. From the temporal dimensions, behavior can be divided into two groups. There is initial behavior i.e. initial adoption, first-time usage, and rejection at the pre-implementation stage. The other is post-adoption or post-implementation behavior i.e. sustained continuous usage and discontinuous usage (replacement or disenchantment). From the volitional dimension, usage could be mandatory or voluntary. Three major factors are identified to be influencing the strength of behavior: the degree of which intention and behavior correspond in their levels of specificity; stability of intention; and the extent to which executing the behavior is completely under the person's volitional control (or one's own will to act). It was postulated that among the three factors, the most influential being correspondence in levels of specificity.

2.1.1.5 Limitations and Loopholes in TRA

The greatest limitation of the theory stems from the assumption that behavior is under volitional control. That is, the theory only applies to behavior that is consciously thought out before hand. Irrational decisions, habitual actions or any behavior that is not consciously considered cannot be explained by this theory. To overcome these problems Ajzen proposed the Theory of Planned Behavior (Schifter & Ajzen, 1985). The new theory addresses the issue of behaviors that occur without a person's volitional control. This theory is the same as the Theory of Reasoned Action except for the addition of the PBC component. The PBC component consists of control beliefs and perceived power. These factors state that motivation, or intention, is influenced by how difficult the task is perceived to be and whether the person expects to successfully complete the behavior.

2.1.2 Theory of Planned Behavior (TPB)

TRA works most successfully when applied to behaviors that are under a person's volitional control. If behaviors are not fully under volitional control, even though a person may be highly motivated by her own attitudes and subjective norm, she may not actually perform the behavior due to intervening environmental conditions. The Theory of Planned Behavior (TPB) was developed to predict behaviors in which individuals have incomplete volitional control.

The major difference between TRA and TPB is the addition of a third determinant of behavioral intention, perceived behavioral control (PBC). Figure 2.2 shows the model of TPB.

2.1.2.1 Perceived Behavioral Control (PBC)

According to Ajzen (1991), perceived behavioral control indicates that a person's motivation is influenced by how difficult the behaviors are perceived to be, as well as the perception of how successfully the individual can, or can not, perform the activity. If a person holds strong control beliefs about the existence of factors that will facilitate a behavior, then the individual will have high perceived control over a behavior. Conversely, the person will have a low perception of control if she holds strong control beliefs that impede the behavior.

PBC can also refer to the degree to which an individual feels that performance or nonperformance of the behavior in question is under his or her volitional control (Ajzen, 1991). People are not likely to form a strong intention to perform a behavior if they believe that they do not have any resources or opportunities to do so even if they hold positive attitudes toward the behavior and believe that important others would approve of the behavior (subjective norm). PBC can influence behavior directly or indirectly through behavioral intentions. A direct path from perceived behavioral control to behavior is expected to emerge when there is some agreement between perceptions of control and the person's actual control over the behavior.

PBC is represented by perceived compliance control as it gives more meaningful approach in this study.

2.2 Application of TRA and TPB in Various Domains

Even though the theories used in this study are in the psychological field, they were both are widely accepted model that has been used in predicting and explaining behavior across a wide variety of domains.

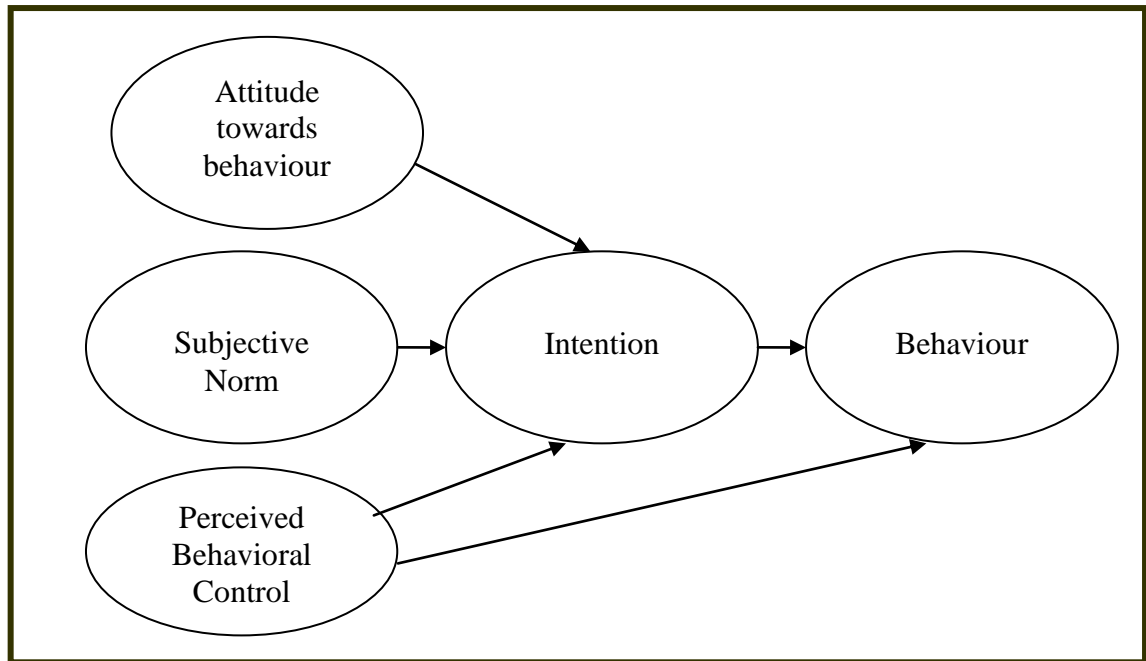


Figure 2.2: Theory of Planned Behavior
(Source: Ajzen, 1991)

The applicability of the TRA was tested by Ramayah and Aafaqi (2005) in predicting the intention to shop online among a group of Masters of Business Administration students of a public institution of higher learning. The findings indicate that the TRA is a valid model where attitude and subjective norm were found to be positively related to intention with attitude being the more influential predictor.

In educations, Burak (2004) examined attitudes, intentions and behaviors of college students towards recreational reading using the theory of reasoned action (TRA) as a framework. TRA models fits well with the purpose of the study and it is found that the student's attitude made the most substantial contributions to the predictions of the student's intention. They believe that leisure reading reduces stress, engages imaginations and not a waste of time. Subjective norm have lack of significant contribution to the student's intention to read for pleasure and leisure. TRA also found to be well applied in student's study behavior during final exams (Siredis et al, 1998).

In situation where the decision makers are expert in their field, subjective norm does not fit the TRA model that well and does not have a significant influence on the intention as studied by Thompson and Panayiotopoulos (1999) but attitude is still the main predictor of behavioral intention.

Apart from predicting a socially accepted intention and behavior, TRA and TPB had also been used in predicting unethical behavior. Chang (1998) had tested the TRA and TPB as applied to an unethical behavior in information systems area i.e. software piracy. His finding shows that TPB is better than TRA in predicting unethical behavior and PBC is the most important predictor of intention to use illegal software copies. The validity of the TPB is proven as applied to the domain of unethical behavior.

Ramayah et al (2002) studied the relationship between belief, attitude, subjective norm, intention and behaviors towards number of gambling (legal and illegal) based on the TRA. Subjective norm had a higher prediction power than the attitudinal component. The closest friend element in subjective norm component was found to be more influential.

Sheeran et. al (2003) predicted the behavior in diet and exercise domain using TPB model. Prediction of behavior by PBC was better at higher levels of accuracy. The greater accuracy of PBC is associated with a stronger relationship between PBC and behavior. Rhodes and Courneya (2003) examined the optimal conceptualization of either two subcomponents or a general common factor for each of TPB concept within an omnibus model for the prediction of intention and behavior in exercise domain and found that general subjective norm factor was optimal predictive conceptualization over two separate injunctive and descriptive norm components. A

specific self-efficacy component (not controllability or general factor of PBC) predicted intention optimally

TPB predicted the willingness of a gender to pursue a sex-atypical careers (Giles & Rea, 1999). Males were significantly less likely to intend pursuing people-oriented career than were females and they also displayed lower self-efficacy for careers in the caring professions whereas females were not significantly less likely than males to intend pursuing action-orientated careers nor were they less confident about their ability to do so.

Kalafatis et. al (1999) applied TPB in their green marketing study to examined the determinants that influence consumer's intention to buy environmentally friendly (EF) products across two different market conditions. In UK, subjective norm was found to be the only determinant associated with a significant direct effect on intention. This characterized by the presence of a number of high profile pressure groups (e.g. Greenpeace etc.) and a wide variety of EF products are available. As for Greek, a more complicated pattern appears. Although PBC is the only determinant that is associated with a significant direct effect on intention, the modification indices indicate significant indirect effects at both referent and control beliefs. This is due to the results of dominance of personal influences.

Cordano and Frieze (2000) applied TPB in their pollution reduction preferences study. Two components of the independents variables of TPB i.e. attitude and subjective norm has a positive relationship with the behavioral preferences in reducing pollution whereas PBC has a negative relationship.

Peach et. al (2005) support TPB in their study describing employee readiness for change. Normative beliefs indicated that social influence can play an important function to create social pressure among employees to act in change-supportive ways.

Lin and Lee (2004) also support the TPB model in their findings where intention is positively affecting behavior in corporate knowledge-sharing. The intention also is positively affected by its antecedents i.e. attitude, subjective norm and PBC.

Internet purchasing behavior that are predicted by TPB model is positively affected by PBC sub-component i.e. beliefs about self-efficacy (George 2004). Xu and Paulins (2005) verifies the TRA application in college students' attitudes toward shopping online for apparel products. Students who had intentions to shop online for apparel products had significantly more favorable attitude than those who did not have intentions.

Gewald and Dibbern (2005) used TPB model focusing the impact of attitude's component named as perceived benefits and perceived risks on the intention to increase the level of business process outsourcing (BPO). The study revealed that perceived benefits outweigh perceived risks, which indicates that managers are more concerned with solving current problems by accessing the advantages of outsourcing than with future problems that may or may not arise.

2.3 Literatures On Halal Issues

As MS1500: 2004 Halal Standard is still new among Malaysian there is no published research or study that are discussing this particular Halal Standard as far as the researcher is concerned. Acknowledging the void in this area, this study is attempting in contributing a piece of thought in Halal Standard domain. However there are some studies conducted surrounding the halal issues in general.

Shahidan and Osman (2002) had voiced out the concerned of Muslim consumers over the trustworthiness of the halal certifying bodies. Food consumption and selection is closely linked to religion which has acted as powerful motive for the

intentions to purchase. Religious building and rituals are important factors for the attractions for the consumer behavioral intention to purchase the food products.

In fulfilling Muslim's consumers demand towards halal products, the understanding of halal concept among the producers is vital. In Malaysian context, as mentioned by Asyraf and Wan Ibrahim (2004), most of the entrepreneurs have good knowledge and understanding on food hygiene and halal food including ways it is processed, prepared and marketed. This is a good sign for gearing up to be a regional Halal hub.

Suhaiza et. al (2004) identify the factors that influence the consumer intention in purchasing halal food products using theory of planned behavior (TPB) model which was significant and useful. Subjective norm component is a better predictor of intention to purchase halal food products with closest friends and families were the dominant referents.

However instead of having fundamental knowledge and understanding of the halal concept, Malaysian manufacturers are not ready to commit themselves to a higher level of Halal Standard. Rosly and Suhaiza (2004) reported that the manufacturers studied have negative perception toward ISI2020 (international acclaimed Halal Standard) ; they perceived that the standard has relative low advantage, complex to implement, not trialable, without tangible benefits and incompatible to the company's needs and organizational operations.

Most halal related research is concentrated on the downstream stages focusing on acceptance, use and user satisfaction towards the halal certification (Pointing & Teinaz, 2004). However there is very little empirical research focused on the upstream issues such as the adoption decision and its antecedents in relation to halal food or product in Malaysia (Rosly & Suhaiza, 2004).

2.4 TPB versus Other Models

East (1997) indicated that TPB had been applied in making behavioral decisions to a wide variety of topics such as physical activities, quitting cigarette smoking, blood donation, complaining, internet usage and many more and the model has provided excellent estimates.

Models such as Bettman's Information-Processing Model (1979), Engel-Kollat Blackwell Model (1986), Howard-Sheth Model (1969), Nicosia Model (1996), Sheth Family Decision Model (1974), The Seth-Newman-Gross Model (1991) as cited by Abbas (2004) are focusing more on consumer buying decision. They does not really mentioned intention as the antecedent of the behavior or decision making.

Technology Acceptance Model, TAM (Davis et al, 1989) is used to predict the intention in adopting particular technology especially information technology. Only attitude component was used with its two antecedents, perceived usefulness and perceived ease of use. Originally subjective norm was not included in TAM as it did not directly influence behavioral intention until TAM2 was established where the significance importance of subjective norm is proven (Venkatesh & Davis, 2000). However TAM2 is still lack of one component that is perceive behavioral control which is essential to the purpose of this study. Therefore TPB was chosen over TAM. The choice was supported by Jasman et al (2003) where TPB was found to be better than TAM in explaining behavioral intention.

2.5 Theoretical Framework

TPB model has been successfully applied to a wide range of consumer behaviors at individual level but it is not appropriate to an organizational level which often a dynamic and intricate multiphase, multiperson, multidepartmental and multiobjective

process (Johnston & Lewin, 1996). However small/medium businesses are not so complex and decisions are frequently taken by single individual. Hence the key predictors may be similar to those of individual consumers. Therefore TPB model is applicable where a single person is responsible for a specific decision (Thompson & Panayiotopoulos, 1999). The TPB model can also be applied to SMEs by considering that the respondents are top managers who are the primary decision makers (Grandon and Mykytyn Jr.,2004).

Based on the discussion above and review from past literature, a theoretical framework of this study is derived from the TPB framework. The attitude component is represented by perceived problems and perceived benefits, the subjective norm is represented by competitive pressure and customer's expectations and the PBC components is represented by perceived compliance control. The theoretical framework is shown in figure 2.3, which presents the relationship between the independent variables and the dependent variables.

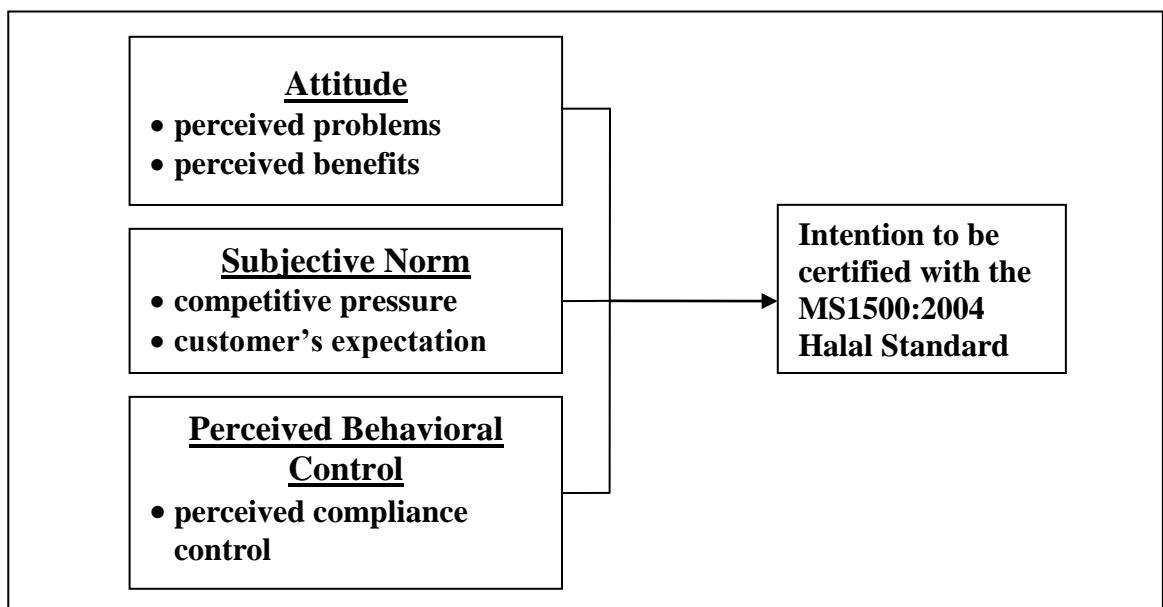


Figure 2.3: Theoretical Framework.

2.6 Research Hypotheses

The following hypotheses have been formulated to test the relationship between both the independent variables and dependent variables:-

- H1: The intention of halal food manufacturers to be certified with the MS1500:2004 Halal Standard is negatively influenced by perceived problems
- H2: The intention of halal food manufacturers to be certified with the MS1500:2004 Halal Standard is positively influenced by perceived benefits
- H3: The intention of halal food manufacturers to be certified with the MS1500:2004 Halal Standard is positively influenced by competitive pressure.
- H4: The intention of halal food manufacturers to be certified with the MS1500:2004 Halal Standard is positively influenced by customer's expectation
- H5: The intention of halal food manufacturers to be certified with the MS1500:2004 Halal Standard is positively influenced by perceived compliance control
- H6: TPB model is sufficient predictors for intention of halal food manufacturers to be certified with the MS1500:2004 Halal Standard

2.7 Summary of the Chapter

This chapter had pointed out the relevancy of the TRA and TPB to the purpose of this study. TPB was chosen due to its advantages comparing to other possible models. Based on TPB model and some adjustment to the model, theoretical framework was created and hypotheses were formulated to serve the objective of this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

Research methodology as defined by Zikmund (2003) is a master plan specifying the methods and procedures for collecting and analyzing the needed information. As for that, this chapter explains the steps taken and the methodology used in order to achieve the objective of this study. The following sections will discuss on the research design, data collection method, variables and measurement, questionnaire design and data analyses accordingly.

3.1 Research Design

The emphasis of this study is on the relationships between dependent variable and the independent variables. Its objective is to examine the relative importance of the independent variables as factors that influences the intention of halal food manufacturers to be certified with the MS1500:2004 Halal Standard. Its focuses on the influence of perceived problems and perceived benefits (attitude), competitive pressure and customer's expectation (subjective norm) and perceived compliance control (PBC) on the intention of halal food manufacturers to be certified with the Halal Standard.

A non-probability purposive sampling method was used in this study. The unit of analysis in this study is the halal food manufacturers in Malaysia. The FMM-MATRADE Industry (Food and Beverage – halal section) 2005/2006 directory was used as population frame. Population comprised of all food manufacturers that have been certified with the current halal logo. Sample size of 115 respondents was targeted

for the study as this reflected to the number of population for halal food manufacturer that are listed in the directory. The target respondents for this study are at the minimum level of managers to owners as they have the decisive and influential power to determine whether or not to be certified with the Halal Standard.

3.2 Data Collection Method

The data are collected through a self-administered questionnaire. Questionnaire is used due to its convenient to obtain data and answers to questions can be easily coded (Sekaran, 2003). The function of a questionnaire is to achieve the study objectives through the measurement of variables of interest (Oppenheim, 1996 as cited by Abbas, 2004). One set of questionnaire is distributed to each of the target sample through mail. As researcher agreed with Zikmund (2003), mail survey is used due to several reasons namely,

- i) easy access throughout a large geographical area
- ii) cost effective
- iii) respondent's convenience which will result in more honest answers.
- iv) researcher's absence will eliminates pressure during answering the questions

A stamped self addressed envelop is attached with each set of the questionnaire to ensure that it is returned back.

3.3 Variables And Measurements

Variables in this study are divided into two groups, independent and dependent. The independent variables consist of perceived problems, perceived benefits, competitive pressure, customer's expectation and perceived compliance control. Dependent

variable consist of intention of halal food manufacturers to be certified with the Halal Standard. The measurement of the variables is discussed in the following sections.

3.3.1 Independent Variables

a) Perceived Problems

Perceived problems were measured by five items. It refers to unfavourableness and the perception of the burden of works, efforts and costs that halal food manufacturers had to put up with if they were to be certified with the Halal Standard such as ‘company will need to commit huge resources for Halal Standard implementation’. These items were measured on 5 point likert scale indicated with strongly agree (5) to strongly disagree (1) and the mid-point of neutral (3).

b) Perceived Benefits

Perceived benefits were measured by five items. It refers to the favourableness and the perception of the financial and operational benefits and advantages that the halal food manufacturers will enjoy if they were to be certified with the Halal Standard such as ‘company will gain more new customers when certifying with Halal Standard’ and ‘company will gain better market position with Halal Standard’. These items were measured on 5 point likert scale indicated with strongly agree (5) to strongly disagree (1) and the mid-point of neutral (3).

c) Competitive Pressure

Competitive pressure refers to influences or forces that competitors provide in order for halal food manufacturers to be certified with the Halal Standard such as ‘my company should be certified with the Halal Standard because other

competitors are doing so'. Four items were used to measure it and they were measured on 5 point likert scale indicated with strongly agree (5) to strongly disagree (1) and the mid-point of neutral (3).

d) Customer's Expectation

Customer's expectation refers to what halal food manufacturers think the customers expect from them pertaining to the Halal Standard certification such as 'our customers want us to be certified with the Halal Standard. Four items were used to measure it and they were measured on 5 point likert scale indicated with strongly agree (5) to strongly disagree (1) and the mid-point of neutral (3).

e) Perceived Compliance Control

Eight items were used to measure perceived compliance control which refers to the level of control of the resources halal food manufacturers have if they were to be certified with the Halal Standard such as 'my company capable in providing trained workers in order to comply with Halal Standard' and 'my company can afford to provide suitable equipments according to Halal Standards requirements. All items were measured on 5 point likert scale indicated with strongly agree (5) to strongly disagree (1) and the mid-point of neutral (3).

3.3.2 Dependent Variable

Intention to be certified with the Halal Standard

Five point likert scale is used to measure intention to be certified with the Halal Standard. The scale ranging from very likely (5) to very unlikely (1) with the mid-point unsure (3). It is measured by three items such as 'I intend to make my

company be certified with the Halal Standard in the near future’, ‘it is our intention to capture a larger muslim market both local and global through Halal Standard certification’ and ‘we are gearing up all the related resources and capabilities in order to be certified with Halal Standard in the near future’.

3.4 Questionnaire Design

The questionnaire that was used in this study is a self constructed. It is divided into seven sections. Questions in section A required respondents to provide some company’s background information such as years of operating, number of employees and so on. Section B deals with the knowledge of the company about MS1500:2004 Halal Standard. Section C is devoted for items representing attitude towards behaviors that consists of perceived problems and perceived benefits. Items in section D is used to measured subjective norm through competitive pressure and customer’s expectation. Section E provided questions where the respondents are required to answer the perceived compliance control items which representing PBC and section F contains items asking on the behavioral intentions. Section G is a general info about the respondents. A sample of questionnaire is in Appendix A.

3.5 Data Analyses

Once the questionnaires were collected, the data were analysed using Statistical Package for Social Science (SPSS version 12) program. The series of analyses was first identified so that proper and meaningful findings could be obtained. The following analyses were conducted on the data collected.

3.5.1 Descriptive Analyses

Descriptive analysis is used to analyse the means, standard deviations, minimum and maximum value of each variables measured. The frequency and percentage are computed to analyse company's and respondent's profile.

3.5.2 One-way Analysis of Variance

One-way analysis of variance (ANOVA) was conducted to determine whether there is a statistically significant differences in means occurred between two or more groups. The key statistic in ANOVA is the F-test of difference of group means, testing if the means of the groups formed by values of the independent variable (or combinations of values for multiple independent variables) are different enough not to have occurred by chance. If the group means do not differ significantly then it is inferred that the independent variable(s) did not have an effect on the dependent variable

3.5.3 Factor Analysis

Factor analysis was performed to ensure the goodness of the measure. It will only allow measures of an acceptable level to proceed with further analysis. It is also used to find latent variables or factors among observed variables. In other words, if the data contains many variables, factor analysis can reduce the number of variables. Factor analysis groups variables with similar characteristics together to produce a small number of factors. The reduced factors can also be used for further analysis. There are three stages in factor analysis. First, a correlation matrix is generated for all the variables. A correlation matrix is a rectangular array of the correlation coefficients of the variables with each other. Second, factors are extracted from the correlation matrix

based on the correlation coefficients of the variables. Third, the factors are rotated in order to maximize the relationship between the variables and some of the factors.

3.5.4 Reliability Test

In determining the reliability items, reliability test was performed. According to Nunnally (1978), the modest reliabilities (Cronbach's Alpha value) of 0.5 or 0.6 should be sufficient. If the value is less than that, the concerned items should be deleted and to run the test again until it reaches the acceptable reliabilities.

3.5.5 Correlation Analysis

Correlation analysis is used to indicate the relationship between variables in the study. The correlation coefficient, r , ranges from +1.0 to -1.0. Zikmund (2003) indicates that if the r value is 1.0, there is a perfect positive linear relationship. If the value of r is -1.0, there is a perfect negative linear relationship or a perfect inverse relationship. No correlation is indicated if $r = 0$.

3.5.6 Multiple Regression

Hypotheses formulated for this study were tested with multiple regression analysis. Regression analysis the relationship between the independent variables and dependent variable. Multiple regression can establish that a set of independent variables explains a proportion of the variance in a dependent variable at a significant level (through a significance test of R^2), and can establish the relative predictive importance of the independent variables (by comparing beta weights). Beta is the average amount the dependent increases when the independent increases one standard deviation and other independent variables are held constant. When conducting regression analyses, several

assumptions should be made. It should be no outliers as it would have a considerable impact on the regression solution. Problems with multicollinearity should be avoided by looking at tolerance value. The higher the intercorrelation of the independents, the more the tolerance will approach zero. When tolerance is close to 0 there is high multicollinearity of that variable with other independents and the b and beta coefficients will be unstable. The more the multicollinearity, the lower the tolerance, the more the standard error of the regression coefficients. The assumptions of normality, linearity, homoscedasticity and independence of residuals can be examined from the residual scatter plot. Significance of the relationship is measured by the p-value in which the lower the value is the more significant the relationship. R square meanwhile measures the total variance explained in the dependent variable by all the independent variables.

3.6 Summary of the Chapter

This chapter had elaborated how the study was conducted to achieve its objective. A census sampling on all halal food manufacturers listed in FMM-MATRADE Industry (Food and Beverage – halal section) 2005/2006 directory was used. Data were collected through a self constructed questionnaire. Five independent variables, perceived problems, perceived benefits, competitive pressure, customer's expectation and perceived compliance control and a dependent variable, intention of halal food manufacturers to be certified with the Halal Standard were analysed through a series of analyses to obtain an explainable results.

CHAPTER 4

RESULTS AND ANALYSIS

4.0 Introduction

This chapter presents the survey findings and the result of the statistical analysis conducted on the data. First, an overview of the organization and respondents profiles is presented. Then, the descriptive analysis of composite variables is shown. This is followed by the results of the one-way anova, factor and reliability analysis of measures. Finally, results of the hypothesis testing are presented before concluding the chapter.

4.1 Profile of the Companies and Respondents

A total of 115 questionnaires were distributed to halal food manufacturers in Malaysia. In the context of this study, the halal food manufacturers are defined as those companies that have been certified with halal logo by JAKIM or the respective state's Islamic Council. As mentioned in Chapter 3, the list of halal food companies is obtained from the FMM-MATRADE Industry (Food and Beverage – halal section) 2005/2006 directory. Being the halal food companies, they form an interesting and influential population and hence they are regularly bombarded with numerous requests to complete questionnaires in regards with halal. These include requests from academics and other types of organization including government, private and non-profit organizations.

According to De Vaus (1996), the most fundamental problem with a mail survey is that of low response rate. The response rate is affected by the combined effects of the choice of topic, nature of the sample, the length of questionnaire, the care taken in implementing the particular survey and other related factors.